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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/773,121	01/31/2001	John C. Adams	10006660-1	5388

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HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
P.O. Box 272400  
Fort Collins, CO 80527-2400

EXAMINER
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STEELMAN, MARY J

ART UNIT	PAPER NUMBER
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2122

DATE MAILED: 12/18/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/773,121

Applicant(s)

ADAMS, JOHN C.

Examiner

Mary J. Steelman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 31 January 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 January 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1, 9, 10, 18 and 19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1, 10, and 20 recite "child object and/or a parent object". Claims 1, 9, 18, and 19 recite "inline and/or container class". Examiner will treat claims as if they read --child object or parent object-- & --inline or container class-- (deleting the "and/").
3. The term ""well-formed" in claim 1 is a relative term which renders the claim indefinite. The term "well-formed" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Examiner will treat claim 1, lines 13-14 as if they read, "...whereby a document can be modeled in software using members of the inline or container classes."

### ***Claim Rejections - 35 USC § 102***

4. (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed

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in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1, 10 and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Branson et al.

Per claims 1, 10 and 20:

(Col. 2, lines 15-20, "...a reusable object oriented (OO) framework for use with object oriented programming systems...applies a rule set developed by a framework user...)

-a base class that defines a parent-child relationship by which a child object is stored within the storage space of its parent object; (Col. 2, lines 22-24, "The conditions are a set of object oriented classes that are organized into an inheritance hierarchy for use by the condition manager." Object oriented classes are defined by a base class with inheritance.)

-an inline class, wherein the inline class is an extension of the base class and wherein a member of the inline class is permitted to be a child object but prohibited from being a parent object; (Col. 2, lines 60-63, "The set of rules and conditions comprise extensible object oriented classes that are customized by the expert system developer" A class (inline class) may be an extension (child) of a base class. Rules / conditions may be applied to prohibit instantiated objects of the class from being a parent object. Also, col. 17, lines 1-4, "Because the Rule set is extensible, it should be understood that the framework user will provide the Rule statement set. That is, the framework user must determine what rule set is appropriate to the expert system that will be tailored.")

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-a container class, wherein the container class is an extension of the base class and wherein a member of the container class is permitted to be a child object or a parent object; (Col. 2, lines 60-63, "The set of rules and conditions comprise extensible object oriented classes that are customized by the expert system developer" A class (container class) may be an extension (child) of a base class. Rules / conditions may be applied to permit instantiated objects of the class to be a parent object, as inheritance (a child of a parent class) is a defined feature of object oriented systems.)

-whereby a document can be modeled in software using members of the inline or container classes. (Col. 10, lines 29-32, "Beyond designing the objects that make up the solution to the specific programming (modeled document) problem, the framework designer must also design how the individual objects interrelate.")

Per claims 4, 6, and 13 and 15:

-an extension of the inline class / an extension of the container class. (As defined in object oriented language, classes may be extended / derived/ "create a child class", and thus, is inherent.)

Per claims 8 and 17:

-the container class corresponds to a document item in which other items can be nested. (As defined in object oriented language, classes may be extended (nested) / derived/ "create a child class", and thus, is inherent.)

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Per claims 9 and 18:

-an extension to an extension of the inline or container classes. (As defined in object oriented language, classes may be extended / derived/ “create a child class”, and additionally extended, and thus, is inherent.)

Per claim 19:

-linking to a library containing the set of classes; (Col. 4, lines 58-67, “framework designers set out to solve a particular problem, they should do more than merely design individual objects and specify how those objects interrelate. They should also design the core function of the framework (library containing the set of classes) (i.e., that part of the framework that is not to be subject to potential customization and extension by the framework consumer)

-programmatically invoking an extension of the inline or container classes. (Col. 4, lines 35-39, “The extensible function, on the other had, is that part of the framework that has been explicitly designed to be customized and extended (extend a base class) ...” and lines 50-52, “...OO programming solution that can be customized and extended to address individualized requirements that change over time.”)

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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7. (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 2, 3, 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,598,035 to Branson et al., in view of US Patent 6,654,754 to Knauft et al.

Branson disclosed an object oriented rule-based expert system framework. A rule set determines classes and inheritance policies. Branson failed to specify that this framework could be used in generating documents using markup languages. Branson failed to disclose, "the document is a markup language document" and "the markup language is selected from the group consisting of HTML, XML, XHTML and SGML".

However, Knauft disclosed dynamically generating documents (col. 6, lines 24-28). See fig. 2, #216A-216N. Knauft disclosed, at col. 8, lines 23-28, "The data objects 216A-216N can be of any arbitrary format and can contain any type of data. For example the data objects 216A-216N can include: an electronic document according to any open or proprietary format, i.e., HTML...SGML...XHTML, XML..."

Therefore, it would have been obvious, to one of ordinary skill in the art, at the time of the invention, to have included HTML, XML, XHTML and SGML documents as noted in Knauft's patent, because they are well known in the art, and when generating documents, using an object oriented framework, the mark up languages permit documents to be widely used over a network.

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9. Claims 5, 7, 14, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,598,035 to Branson et al., in view of US Patent 5,708,825 to Sotomayor.

Branson disclosed an object oriented rule-based expert system framework. A rule set determines classes and inheritance policies. Branson failed to specify that this framework could be used in creating documents using markup languages. Branson failed to disclose “the extension of the inline class corresponds to a document item selected from a group consisting of comment text, formatted text, embedded text, an image, an anchor, a paragraph marker, a line break and a horizontal rule.

However Sotomayor disclosed scanning documents to generate presentation pages (Abstract, line 1-2 & 13). Tags, enclosing defining tokens, are well known in the art and are used for formatting, comments, embedding, etc. As an example, Sotomayor disclosed comment tokens at col. 27, lines 61-64, horizontal rules at col. 30, lines 30 and 54, align middle col. 30, line 37, anchors at col. 31, line 22, paragraph marks at col. 30, lines 4-6, new line at col. 33, line 59.

Therefore, it would have been obvious, to one of ordinary skill in the art, at the time of the invention to have modified Branson’s of an object oriented rule-based expert system framework, using Sotomayor’s page generator to create mark up language documents, including formatting elements, as are well known in the art, because the mark up languages and formatting techniques produce pleasing, meaningful, documents that may be widely distributed over the network.



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*Conclusion*

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mary Steelman, whose telephone number is (703) 305-4564. The examiner can normally be reached Monday through Thursday, from 7:00 A.M. to 5:30 P.M. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Dam can be reached on (703) 305-4552.

The fax phone number is (703) 872-9306 for regular communications and for After Final communications. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Mary Steelman



12/11/2003



**TUAN DAM  
SUPERVISORY PATENT EXAMINER**